COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

* * * * *

In the Matter of:

AN ADJUSTMENT OF RATES OF COLUMBIA GAS OF KENTUCKY, INC.) CASE NO. 9003

O R D E R

Procedural Background

On April 30, 1984, Columbia Gas of Kentucky, Inc., ("Columbia") filed its notice with this Commission seeking to increase its rates and charges for gas service rendered to its customers by $10.16 million,[1] a 7.8 percent increase over normalized test period revenues to become effective May 20, 1984. Columbia further amended its application to include additional increases to $11.4 million, an 8.77 percent increase.[2] However, based on normalized sales volumes determined herein and the rates proposed by Columbia the requested increase is approximately $10.4 million, an 8 percent increase over normalized test period revenues. Columbia stated that the additional revenue was necessary to offset increased operating costs, capital costs and declining sales. In this Order the Commission has allowed an increase in operating revenues of $7,439,652, a 5.72 percent increase.

---

1 Exhibit No. 1, Schedule No. 1.

2 Brief on Behalf of Columbia Gas of Kentucky, Inc., filed September 21, 1984, p. 4.

In order to determine the reasonableness of the proposed request, the Commission by its Order of May 11, 1984, suspended the proposed rates and charges for 5 months after May 20, 1984. Public hearings were held to consider the request in the Commission's offices in Frankfort, Kentucky, on August 23-24, 1984. The Consumer Protection Division of the Attorney General's Office and the Lexington-Fayette Urban County Government ("AG"), and the Eaton Corporation ("Eaton"), had full intervenor privileges. Mr. Morris L. Griffiths was granted limited intervention. The AG and Mr. Griffiths participated in the hearings. Simultaneous briefs were filed on September 21, 1984, and responses have been filed to all data requests.

COMMENTARY

Columbia is one of six subsidiary distribution companies owned by the Columbia Gas System, Inc. ("Columbia System"). Columbia distributes and sells natural gas to approximately 110,941 customers in numerous counties in Central and Eastern Kentucky. Columbia System has headquarters in Columbus, Ohio, and shares most corporate officers with several other Columbia System distribution companies. This leads to the question of whether the officers are primarily concerned with Columbia of Kentucky since it is one of the smaller of the Columbia System distribution companies. The parent company also owns Columbia Gas Transmission Corporation ("Columbia Transmission") which is Columbia's primary source of supply. Given the less than arms-length nature of Columbia's financial transactions with Columbia Transmission and the legal constraints in obtaining verifiable documentation of like transactions with non-affiliated companies, the Commission notifies Columbia that in future proceedings it will bear a considerable burden of proof for all inter-company transactions.

ANALAYSIS AND DETERMINATION

Test Period

Columbia proposed and the Commission has accepted the 12 months ending December 31, 1983, as the test period in this proceeding.

NET INVESTMENT RATE BASE

Columbia proposed a net investment rate base of $52,497,326.[3] The Commission has accepted the proposed rate base with the following modifications:

Prepayments

Columbia proposed to include in rate base the 13-month average of the balance in prepaid nominated gas from December 1982 to December 1983 in the amount of $15,563,366. Utilizing the 13-month average in this instance increases the average significantly due to the inclusion of December, a peak inventory month, twice. The Commission is of the opinion that the 13-month average is inappropriate in this instance and finds that a 12-month average balance in prepaid nominated gas better approximates the capital requirements weighted for annual seasonal fluctuations. For this reason, the Commission has reduced the average prepaid nonimated gas balance by $734,055.

---

3 Burchett Supplemental Testimony, Schedule No. 2.

Prepayments of nominated gas are included in rate base because of the purported necessity of securing gas supplies for periods of heavy demand. Second, prepayments are included in rate base to the extent they are funded by cost bearing capital. It is for this second reason that it is necessary to apply the cost of capital found appropriate herein, which excludes cost free funds, to prepayments so as to compensate Columbia's investors for the use of their capital. Therefore, the Commission has reduced the prepaid nominated gas balance by $2,399,482 to the extent clearly identifiable in cost-free accounts payable,[4] which consequently produces a proper matching of rate base and invested capital.

The aggregate effect of the aforementioned two adjustments is to reduce the average balance of prepaid nominated gas by $3,133,537 for an adjusted balance of total prepayments of $12,511,141.

Cash Working Capital

Columbia proposed to include a cash working capital allowance of $2,094,790[5] based upon the results of lead-lag study.[6] Of central importance to the effective application of a lead-lag study is the establishment of the actual timing and dollar amounts of cash receipts and cash disbursements for the services rendered to the point of incurring cost bearing funds. To facilitate this

---

4 Response to Commission's Order dated July 17, 1984, Item No. 3, p. 1, line no. 5.

5 Exhibit No. 5, Schedule No. 10, Sheet No. 1.

6 Ibid., Schedule No. 11, Sheet Nos. 1-15.

voluminous procedure, a mathematical convenience, in the form of a statistical distribution, is utilized for multiple small cash receipts and cash disbursements such as customer receipts and miscellaneous disbursements. Columbia applied a uniform distribution to determine the amount and timing of cash receipts.[7] The Commission in this instance has accepted the use of a uniform distribution for numerous small cash receipts and disbursements. However, the Commission is of the opinion that the application of a uniform distribution[8] to large cash receipts, such as receipts from industrial users, large commercial users, and sales for resale, is inappropriate. Likewise, the use of a uniform distribution in the case of large cash disbursements, such as wages and salaries and purchased gas, is inappropriate and significantly affects the results of the lead-lag study in this case.

Thus, for large cash receipts and disbursements, the Commission requires the exact time and the exact dollar amount of the cash receipt or cash disbursement. For this reason, the execution of the lead-lag study as proposed by Columbia is seriously flawed. For example, in response to a Commission request for additional information concerning actual leads and lags for large cash receipts and disbursements, Columbia supplied the actual date when "cost bearing liabilities" were incurred for

---

7 Payne Pre-Filed Testimony, pp. 4-5, 7.

8 Ibid., p. 7.

purchased gas.[9] The dates for February, March, August, and November differ from the payment dates as reported in the lead-lag study. Inasmuch as Columbia's lead-lag study in this matter has not been refined to include the proper lead and lag associated with large cash disbursements and receipts, further detailed consideration of the underlying assumptions and methodology is unwarranted.

Moreover, the Commission is not necessarily convinced that in each instance Columbia properly matched the disbursements for incoming goods and services to the point of cost bearing funds with the cash receipt from Columbia's customers for these same outgoing goods and services. It is this Commission's current understanding that proper matching is the fundamental issue behind the testimony of Mr. Hugh Larkin, Jr., Larkin and Associates and witness for the AG,[10] recommending the inclusion of certain cost-free capital items.

Furthermore, this Commission is not entirely convinced of the applicability of a lead-lag study in a vertically integrated utility which, for rate-making purposes, has a "divorced" capital structure and receives all sources of its funding from the very same entity which is the predominate claim for use of the funds.

Therefore, it is the Commission's opinion that the lead-lag study as proposed by Columbia is materially misstated and is not

---

9 Response to Commission's Order dated July 17, 1984, Item No. 4.

10 Larkin Pre-Filed Testimony, p. 10, line 43.

sufficient proof of Columbia's cash working capital needs. The Commission has determined Columbia's cash working capital allowance to be $1,948,474 in order to reflect one-eighth of the adjusted operating and maintenance expense less purchased gas expense found appropriate herein.

In denying the use of the lead-lag study in this instance, the Commission has not passed final judgment on this issue. The Commission will entertain requests for working capital based on lead-lag studies (where the study is justified). The Commission is also monitoring current proceedings before the Federal Energy Regulatory Commission ("FERC") with regard to working capital to assist in its evaluation of the appropriate working capital for gas companies.

Acquisition Adjustment

This Commission has always used the net original cost as the basis for determining revenue requirements. An inequity to ratepayers may occur if a company is allowed to purchase property at above book value and receive rate treatment on the appreciated cost basis, while any property that has not changed hands is treated at net book value. Such a policy could lead to the transference of property in order to increase its value for rate-making purposes. The amount involved in this case is trivial; however, the principle and consistency in its application are important. The Commission has a well established policy of disallowing the amortization of plant acquisition adjustments for rate-making purposes. Therefore, the Commission will not include the net acquisition adjustment of $4,792[11] in the allowed rate base.

Propane Plant

Mr. Larkin proposed in his pre-filed testimony to eliminate Columbia's propane plant facilities from its rate base.[12] These facilities are used to provide colder than normal weather peaking service for Columbia's heat sensitive customers. Although these facilities have not been used since 1978,[13] they have in the past provided service to the customers of Columbia and could become necessary again depending on Columbia's load characteristics. Also, Columbia stated that contingent reductions in the contractual gas supply may require future use of this plant.[14] Therefore, the Commission will allow Columbia to include these facilities in the rate base; however, the Commission, as it has in previous rate cases, admonishes Columbia that in future proceedings the propane plant will be closely scrutinized.

Mr. Larkin also proposed to eliminate the fuel inventory associated with these facilities from Columbia's rate base.[15] Since the Commission has denied Mr. Larkin's proposal to exclude

---

11 Exhibit No. 5, Schedule Nos. 2-3.

12 Larkin Pre-Filed Testimony, p. 11, line 31.

13 Response to Commission's Order dated June 8, 1984, Item No. 29.

14 Response to AG's Data Request dated June 1, 1984, Item No. 22.

15 Larkin Pre-Filed Testimony, p. 12.

the propane plant from Columbia's rate base, its corresponding fuel inventory should also be included.

Accumulated Provision for Depreciation

The Commission has increased Columbia's accumulated provision for depreciation by $84,960 in order to reflect the pro forma adjustments[16] to its test-period depreciation expense.

Thus, the Commission has determined Columbia's net investment rate base to be as follows:

Gas Plant in Service	$61,475,640
Construction Work in Progress	1,783,854
Materials and Supplies	446,680
Fuel Stock Inventory	138,760
Prepayments	12,511,141
Cash Working Capital Allowance	1,948,474
Subtotal	$78,304,549
Less:	
Accumulated Provision for Depreciation	$26,862,161
Retirement Work in Process	35,022
Customer Advances for Construction	718,131
Accumulated Deferred Income Taxes	1,220,196
Pre-Job Development Investment Tax Credits	186,297
Subtotal	$29,021,807
Net Investment Rate Base	$49,282,742

REVENUES AND EXPENSES

Columbia had a reported net operating income of $2,276,246 for the test period. In order to reflect more current operating conditions, Columbia proposed several adjustments to its test period revenues and expenses which resulted in an adjusted net operating income of $5,757,231.[17] The Commission is of the

---

16 Exhibit No. 3, Schedule No. 1.

17 Exhibit No. 10, Schedule No. 1.

opinion that the proposed adjustments are generally proper and acceptable for rate-making purposes with the following exceptions:

Proposed Adjustments to Test-Year Sales Volumes

Columbia has proposed adjustments to test-year sales volumes to reflect a projected loss of sales due to, among other things, customers' conservation efforts. In Columbia's estimation, sales volumes will decline during the remainder of 1984 and in 1985 regardless of the rates set by the Commission in this case. In support of this position, Columbia has analyzed residential and commercial usage from 1980 through 1983, and determined that a trend of declining usage per customer exists through this time period. Although Columbia offers no evidence to indicate this trend will continue into future time periods, it is Columbia's belief this will occur. The reasons for this belief are summarized in Columbia's post-hearing brief:

> Because the gas supply cost increases [since the passage of the Natural Gas Policy Act of 1978] occurred over a relatively short period of time, consumers, especially in the residential sector, were not financially able to institute all conservation measures that were cost-justified for the past 3 years. As Columbia witness, Clay, testified, historic customer conservation patterns indicate that conservation efforts are continuing at the present time in spite of the present stabilization and even decline of recent gas supply costs.[18]

The AG disagrees with the proposed adjustments on both general and specific grounds. He submits in his brief "that it is

---

18 Brief on Behalf of Columbia Gas of Kentucky, Inc., filed September 21, 1984, p. 6.

improper to make an adjustment to raise prices for customers simply due to their conservation efforts. Such adjustments can only serve to exacerbate the problems of lost sales."[19]

In proposing these adjustments Columbia is essentially requesting that the Commission adopt a future or projected test year for rate-making purposes, although this treatment would be restricted to the use of determining revenues. The use of Columbia's projected sales volumes would be a significant departure from past and current rate-making practices of the Commission. The Commission relies upon historical test year results, adjusted for known and measurable changes occurring outside the test year. The Commission has explored the use of a future test year on several previous occasions, and has rejected this methodology.[20] It is the Commission's opinion that the problems associated with the use of a future test year outweigh any potential benefits.

As the Commission finds the use of historical test years for rate-making should not be abandoned, there remains the issue of whether Columbia's proposed adjustments to test-year sales volumes satisfy the known and measurable standard. By any reasonable interpretation of this standard they do not. The adjustments reflect the collective impact of several influences, but there has been no attempt to separate and accurately quantify the magnitude

---

19 Brief of the AG, filed September 21, 1984, p. 4.

20 See, for example, the Order of May 2, 1984, in Administrative Case 264, South Central Bell Telephone Company's Use of a Projected Test Year in Connection with South Central Bell Telephone Company's 1983 Application to Adjust Rates.

of each influence.[21] At best, these adjustments represent rough extrapolations of a past trend into future time periods.

The Commission recognizes that if sales volumes decline as projected by Columbia, it could experience some difficulty in its ability to recover costs. However, the largest single category of Columbia's projected sales losses is industrial sales. Columbia has failed to adequately recognize that, by its own projections, the revenue loss from declining sales in this category will be offset by the increased revenues resulting from higher volumes of transportation gas, even at the current transportation rate of 40 cents per Mcf.[22] Moreover, the increased transportation rate provided for in this Order will result in substantial additional revenues for Columbia.

A major objective of the Commission is to emulate whenever possible the effects and outcomes of competitive markets. In competitive markets, a firm experiencing sales declines will have significant incentives to control costs and take other steps to maintain profitability. The effect of granting Columbia's proposed adjustments would be to unduly insulate the company from developments in its market which would reduce incentives for efficient operation and innovative solutions to the changes occurring in the company's markets. In this case, it is the Commission's opinion that if the sales declines projected by Columbia do

---

21 Response to Commission's Order dated June 8, 1984, Item No. 48.

22 Larkin Pre-Filed Testimony, p. 16.

actually occur, any "regulatory lag" resulting from the use of a historical test year serves as a useful and necessary motivation for Columbia to deal with the problems that underlie sales declines.

Weather Normalization

Columbia proposed a weather normalization adjustment using estimated values for June and September. The AG argued that actual values should be used for these months and proposed a $49,053 increase to test period normalized revenues to reflect this change.[23] Recognizing that weather normalization is not an exact science, the Commission agrees with the AG that actual values should be used whenever possible and accepts the AG's proposed adjustment. Columbia, in its September 21, 1984, brief, referred to the Commission's rejection of the AG's proposed weather normalization adjustment in Case No. 8924, General Adjustment in Electric and Gas Rates of Louisville Gas and Electric Company. In that case the AG proposed that only 6 peak months of sales be considered for weather normalization and the balance of 6 months be ignored. The AG's proposal in this case considers all sales and is consistent with the Commission's decision in Case No. 8924.

---

23 Larkin Pre-Filed Testimony, Exhibit No. (HL-1), Schedule No. 9, pp. 1-5.

Normalized Revenues

Columbia proposed a pro forma level of revenues generated through gas sales of $123,682,903[24] based on its projected level of anticipated sales volume. The Commission has increased this amount by $6,359,979 to $130,042,882 in order to reflect actual test-period sales volumes normalized for the April 1, 1984, purchased gas adjustment ("PGA") rate[25] on file with the Commission. This results in a net reduction to test-year actual gas revenues of $7,600,143.

Lost and Unaccounted-For Gas

Columbia proposed a level of lost and unaccounted-for gas of 518,800 Mcf or 2.57 percent based on its projected sales volume for the 12 months ended September 1985.[26] Mr. Larkin proposed a level of lost and unaccounted-for gas of 471,500 Mcf or 1.7781 percent.[27] The Commission agrees with Mr. Larkin that Columbia's proposed percentage of lost and unaccounted-for gas is exceptionally high for Columbia and is of the opinion that the 3-year average of the 1979 through 1980, 1980 through 1981, 1981 through 1982, historical lost and unaccounted-for gas is representative of Columbia's actual experience. Therefore, the Commission finds that a fair and reasonable lost and unaccounted-for gas percentage is 1.83 percent.

---

24 Exhibit No. 10.

25 Case No. 8738-H, Purchased Gas Adjustment of Columbia Gas of Kentucky, Inc., dated April 1, 1984.

26 Exhibit No. 9, Schedule No. 1, line no. 7.

Purchased Gas Expense

Columbia proposed a pro forma purchased gas expense of $105,031,143.[28] The Commission has increased this amount by $5,151,700 to $110,182,843 to reflect the test period volume and the appropriate percentage of lost and unaccounted-for gas normalized for the April 1, 1984, PGA[29] on file with the Commission for a net reduction to the actual test year expense of $7,338,046.

Wages and Salaries

The test period wages and salaries were $7,791,175[30] and Columbia proposed to normalize wage increases granted during the test period to an end-of-period level resulting in an increase of $397,416.[31] Columbia also had scheduled wage increases in 1984, totaling $585,897,[32] annually. Columbia proposed a $405,141[33] adjustment to wages, a reduction of $180,756[34] to reflect only a 5 percent increase from proposed 1983 annualized wages.

Current trends indicate a continued low rate of inflation. Given present economic conditions in general, it is imperative

---

27 Larkin Pre-filed Testimony, p. 35.

28 Exhibit No. 1, Schedule No. 1, Sheet No. 2.

29 Case No. 8738-H, Commission's Order dated April 1, 1984.

30 Exhibit No. 2, Schedule No. 2, Sheet No. 4.

31 $284,753 + $86,604 + $26,059 = $397,416.

32 Exhibit No. 2, Schedule No. 2, Sheet No. 4.

33 *Ibid.*

34 Exhibit No. 1, Schedule No. 2, Sheet No. 1.

that utility employees not be overly compensated compared to their counterparts in competitive industries. It is the Commission's responsibility, as a surrogate for competition, to insure that the utilities under its jurisdiction are not insulated from the effects of today's economy.

Additionally, in establishing the adjusted level of operating revenues and expenses, net investment rate base, and capitalization, the Commission must develop a proper matching of earnings and rate base. This is accomplished by adjusting the historical test year operations for appropriate known and measurable changes to arrive at a pro forma statement of operations which coincides with the test-year-end rate base and capitalization. The Commission is of the opinion that it is inconsistent to adjust selected expense items for changes occurring after the test year while other revenue and expense items as well as components of the rate base remain at year-end levels. It is the opinion of this Commission that wage and salary increases occurring during 1984 are too far outside the end of the test period and to adjust this item as proposed by Columbia would improperly update the year-end expenses and result in a mismatch of earnings, rate base and capitalization.

Based on the above-mentioned findings, the Commission has reduced Columbia's proposed adjustment by $405,141. Moreover, the Commission reiterates its prior notice to Columbia that if future wage increases are granted which the Commission determines to be excessive, the Commission will take appropriate action to insure that the customers of Columbia will not bear that portion of the wage increase found to be excessive.

Payroll Taxes

The Commission has reduced Columbia's pro forma payroll tax expense by $28,360[35] in order to reflect the Commission's adjustment to Columbia's pro forma wage expense.

Pensions and Benefits

Columbia proposed an adjustment to pensions and benefits of $276,478.[36] As part of an adjustment to reflect economic conditions Columbia reduced its request by $93,184[37] for a net adjustment of $183,294 and a total level of pension and benefits requested of $1,981,302.[38] The Commission has reduced Columbia's adjustments by $92,534[39] to reflect the allowed level of wages and salaries for a net adjustment to increase test period expenses by $90,760.

Injuries and Damages

Columbia proposed a pro forma expense for injuries and damages of $41,704 based on a 5-year average of this amount. Mr. Larkin proposed a $22,463 reduction in Columbia's request by

---

35 $405,141 (Wage) X .07 (FICA rate) = $28,360.

36 Exhibit No. 2, Schedule No. 2, Sheet No. 2.

37 Exhibit No. 1, Schedule No. 3, Sheet No. 1.

38 Exhibit No. 7, Schedule No. 3, Sheet No. 3.

39

Reduced Wages	$405,141
Contribution Rate	22.84%
Reduction	$ 92,534

excluding non-recurring settlements which reflect long-range risk expectations. The Commission agrees in part with Columbia and in part with Mr. Larkin. It is the Commission's current understanding that for each possibility of a downward risk there is a possibility of upward risk; merely excluding the downward risk and not scrutinizing upward possibilities is not fair and reasonable.

The 5-year period used by Columbia included net damage settlements in 1979 of \$133,574 and in 1983 of \$<297>.[40] The Commission is of the opinion that these settlements are of a non-recurring nature which should properly be reflected in the long-range risk expectations of stockholders and should not be borne by the ratepayers. Therefore, the Commission has reduced this pro forma level by \$16,624 in order to reflect the 5-year average of this account exclusive of the above-mentioned settlements.

Amortization of Acquisition Adjustment

Columbia included in its test period operations the current year's amortization of its acquisition adjustment citing that the true depreciation base of an asset is its transaction cost. Since the Commission has disallowed the inclusion of all cost increases above those of plant when originally placed in service, the Commission is of the opinion that this associated depreciation expense should also be disallowed. Therefore, the Commission has reduced Columbia's test period expense by \$2,054.[41]

40 Exhibit No. 2, Schedule No. 2, Sheet No. 2.

41 Exhibit No. 3, Schedule No. 1, Sheet No. 1.

Allowance for Funds Used During Construction

Columbia included construction work in progress in its rate base that was eligible for capitalization for allowance of funds used during construction ("AFUDC") of $373,563.[42] Columbia included an AFUDC of $16,885[43] in determining its pro forma net operating income. The Commission has determined this amount based on the overall rate of return allowed herein to be $44,753 and has increased Columbia's net operating income by $27,868[44] herein.

Uncollectible Accounts

Columbia proposed a net decrease to its reported uncollectible accounts expense based on a projected increase in ordinary uncollectibles of $115,904, and a projected decrease of $245,032 due to the amortization of the Johnson County Gas Company ("Johnson County") debt over 3 years. These adjustments result in a projected level of annual uncollectibles of $508,272.[45]

Mr. Larkin proposed that the level of ordinary uncollectibles be determined using the percentage of write-offs over the

---

42 Response to Commission's Order dated June 8, 1984, Item No. 24.

43 Exhibit No. 7, Schedule No. 1.

44

Eligible CWIP	$373,563
Cost of Capital	11.98%
Rate of Return	$ 44,753
Less:	
Test Period Actual	16,885
Net Adjustment	$ 27,868

45 Exhibit No. 2, Schedule No. 1, Sheet No. 5.

past 4 years. Mr. Larkin calculates the bad debts percentage, based on a historic 4-year average of provision for bad debts, to be .2614 percent.[46] Mr. Larkin also proposed to exclude the amortization of Johnson County bad debt because the status of this account is in flux at this time and negotiations may lead to a resolution of the account.

The Commission agrees with Mr. Larkin's appraisal of the status of the Johnson County account. Johnson County was placed in federal receivership on September 12, 1984, and until the trustee determines the final disposition of claims against Johnson County, the amount of bad debt expense is not known or measurable. However, the Commission disagrees with Mr. Larkin on the issue of "ordinary" bad debts. More specifically, the Commission objects to the use of the provision for bad debts in his calculation rather than net charge-offs. The statistic of primary importance in determining the projected bad debts expense is the ratio of net charge-offs to billed revenues.

The Commission also disagrees with Columbia's method of calculating uncollectible accounts expense which heavily weights the recession year of 1982 in attempting to weight the average in favor of current experience;[47] however, the most current experience is 1983.

---

46 Larkin Pre-Filed Testimony, Schedule No. 13.

47 Transcript of Evidence ("T.E."), August 23, 1984, Volume No. 1, p. 159.

The Commission has determined based on the net charge-offs of 1980 through 1983[48] and gross billed revenues as reported in the respective annual reports that the net charge-off ratio is .2379 percent which includes without disproportionate weight the trough of a business cycle. Therefore, based on revenues found appropriate herein, the Commission finds a fair and reasonable level of ordinary uncollectible accounts expense to be $309,372.[49] The Commission finds that consideration of the Johnson County account should be deferred until such time as that amount of the uncollectible is determinable.

Rent Expense

Columbia proposed an adjustment of $160,945 to rent expense to reflect its proportionate share of the annual expenses attributable to the new office building in Columbus, Ohio, for an annual level of rent expense of $331,746.[50] On reexamination of the adjustment, Columbia found that the adjustment could be reduced by $70,895 to $90,050 for a pro forma level of rent expense of $260,851.[51] Columbia cited that the new offices would provide for

---

48 Detailed workpapers filed May 14, 1984, Tab No. 8, Sheet No. 1.

49

Normalized Revenues	$130,042,882
Charge-off Ratio	.2379%
	$ 309,372

50 Exhibit No. 2, Schedule No. 2, Sheet No. 3.

51 Response to Hearing request, Tab No. 3.

much more efficient operations[52] and that Columbia's earlier headquarters had been threatened with condemnation by the City of Columbus.[53]

Mr. Larkin suggested that the Commission may wish to disallow the increase as Columbia had made no offsetting adjustment to reflect the increase efficiency.[54] Mr. Larkin also suggested a minimum adjustment reducing rental expense by $55,674 to account for the exclusion of the West Virginia subsidiary.[55]

The Commission is concerned with efficiency and its dollar impact on providing service to Columbia's customers. However, the efficiency to which Columbia refers is improved working conditions, better communication, improved morale, etc.[56] All of these are intangible (and thus nearly impossible to quantify) and yet may be very genuine. Mr. Larkin failed to note the fact that the prior 66-year old building was threatened by condemnation, leaving Columbia little choice but to seek alternative quarters. To Mr. Larkin's minimum adjustment, the Commission cites the testimony of Mr. J. W. Schweitzer, Senior Rate Engineer, Columbia, that the West Virginia subsidiary was factored from the allocation formula.[57] For these reasons, the Commission rejects Mr. Larkin's

---

52 Response to AG's Data Request dated June 1, 1984, Item No. 30.

53 Response to Hearing request, Tab No. 3.

54 Larkin Pre-Filed Testimony, p. 32.

55 <u>Ibid</u>., p. 33.

56 Response to Hearing request, Tab No. 5.

57 T.E., pp. 145-148.

proposals in this instance. However, the Commission maintains its skeptical attitude toward service corporation charges and advises Columbia that if any charges are found to be unreasonable they shall not be borne by Columbia's customers.

Interest Synchronization

Mr. Larkin, in his prefiled testimony, took exception to Columbia's method of calculating interest synchronization.[58] Specifically, Mr. Larkin objected to the subtraction of the deferred investment tax credits from rate base for purposes of computing the imputed debt expense. The Commission concurs with Mr. Larkin and has determined imputed interest by applying the weighted cost of debt directly to rate base. The Commission reaffirms its method of determining imputed interest expense and by using the capital structure and weighted cost of debt found reasonable herein, has determined interest charges for rate-making purposes to be $2,308,605, an increase of $4,802 to test-period actual interest expense.

Porta-Processor

Columbia proposed additional expenses above cost savings of $15,921[59] for the implementation of new technology designed to speed meter reading and customer billing which is scheduled to be in operation in early 1985.[60] The Commission is eager to

---

58 Larkin Pre-Filed Testimony, p. 32.

59 Detailed workpapers filed May 14, 1984, Tab No. 7, Sheet Nos. 1-2.

60 T.E., p. 53.

encourage all efforts which improve service to Columbia's customers or reduce costs. However, the record currently supports no tangible improvement in service to Columbia's customers. Furthermore, it is obvious from the proposed net increase in expenses, that the program is not currently successful as a cost-cutting measure and does not fully reflect ongoing cost savings. Therefore, the Commission denies this proposed increase in expenses.

Assessment Fees

Columbia paid Commission assessment fees during the test period of $125,079. After consideration of the 1983 revenues of Columbia, the Commission has increased this amount by $27,683.[61]

Normalized Income Taxes

Columbia had actual income tax refunds during the test period of $363,160. The normalizing adjustments made by Columbia and the Commission to Columbia's test period operations have the net effect of increasing this tax refund by $358,695 to $721,855.

The Commission finds that Columbia's adjusted test period operations are as follows:

	Actual	Adjustments	Adjusted
Operating Revenues	$137,773,112	$<7,693,969>	$130,079,143
Operating Expenses	135,496,866	<7,345,887>	128,150,979[62]
Net Operating Income	$ 2,276,246	$ <348,082>	$ 1,928,164

[61] Actual 1983 Assessment.

[62] Includes AFUDC of $44,753.

Capital Structure

Mr. Michael W. O'Donnell, Vice President of Columbia Gas System Service Corporation, recommended using the System's end-of-test-year consolidated capital structure containing 45.35 percent long-term debt, 4.26 percent preferred stock and 50.39 percent common equity.[63] Mr. O'Donnell recommended that the Commission exclude short-term debt from the capital structure because the System's short-term financing requirements were unusually high during the test year and the average short-term interest rate was unusually low.[64]

Mr. Larkin recommended using the System's consolidated end-of-test-year capital structure excluding short-term debt.[65] He proposed excluding short-term debt only if the Commission disallowed the inclusion of the 13-month average of nominated gas in rate base.[66] Otherwise, short-term debt should be included and the capital structure would contain 9.18 percent short-term debt, 41.19 percent long-term debt, 3.86 percent preferred stock and 45.77 percent common equity.[67] Mr. Larkin tied his capital structure recommendation to one of his rate base recommendations.

---

63 O'Donnell Pre-Filed Testimony, p. 2.

64 Ibid., p. 13.

65 Larkin Pre-Filed Testimony, p. 15.

66 Ibid.

67 Ibid.

The Commission is of the opinion that Columbia's capital structure should contain the test-year average amount of short-term debt. In Columbia's last rate case, Case No. 8738, An Adjustment of Rates of Columbia Gas of Kentucky, Inc., the Commission determined that short-term debt should be included in the capital structure because short-term debt was an integral part of Columbia's financings.[68] Therefore, the Commission is of the opinion that the capital ratios of 9.18 percent short-term debt, 41.19 percent long-term debt, 3.86 percent preferred stock and 45.77 percent common equity are reasonable. Columbia's debt ratios are at an investment grade level based on Standard & Poor's criteria.[69]

	Amount	Percent
Short-term Debt	$ 4,524,156	9.18
Long-term Debt	20,299,561	41.19
Preferred Stock	1,902,314	3.86
Common Stock	22,556,711	45.77
Total	$49,282,742	100.00

RATE OF RETURN

Mr. O'Donnell proposed a 9.16 percent cost of long-term debt and an 11.05 percent cost of preferred stock.[70] Those were the embedded end-of-test-year costs for long-term debt and preferred stock. Mr. Larkin also recommended using a 9.16 percent

---

68 Case No. 8738, Order entered July 5, 1983, p. 21.

69 Standard & Poor's Credit Overview, Corporate and International Ratings, p. 40.

70 O'Donnell Pre-Filed Testimony, Schedule No. 4.

cost of long-term debt and an 11.05 percent cost of preferred stock.[71] The Commission is of the opinion that these costs are reasonable.

Mr. O'Donnell did not recommend including short-term debt in the capital structure but he stated that the average cost of short-term debt during the test year was 9.10 percent.[72] Mr. Larkin recommended using a 10.73 percent cost of short-term debt based on a weighted average of the prime rate.[73] The Commission is of the opinion that a 9.95 percent cost of short-term debt is reasonable. This is the 12-month average, through August, of the 3-month commercial paper rate as reported in the Federal Reserve Statistical Release.

Mr. O'Donnell recommended a 17.5 percent return on equity based on a discounted cash flow analysis and a risk premium analysis.[74] At the hearing, Mr. O'Donnell stated that Columbia had made a policy decision to request a 15 percent return on equity, even though a higher return was justified.[75] Mr. Larkin accepted Columbia's requested 15 percent return and did not perform a cost of equity analysis.[76] The requested 15 percent

---

71 Larkin Pre-Filed Testimony, p. 14.

72 O'Donnell Pre-Filed Testimony, p. 13.

73 Larkin Pre-Filed Testimony, Exhibit No. (HL-1), Schedule No. 4.

74 O'Donnell Pre-Filed Testimony, p. 13.

75 T.E., p. 25.

76 Larkin Pre-Filed Testimony, p. 14.

return on equity was the same return granted by the Commission in Columbia's last rate case (Case No. 8738).[77] After considering all of the evidence, including current economic conditions, the Commission is of the opinion that a 15 percent return on equity is fair, just and reasonable. This return on equity should not only allow Columbia to attract capital at reasonable costs to insure continued service and provide for necessary expansion to meet future requirements, but also should result in the lowest reasonable cost to the ratepayer.

Mr. Larkin recommended excluding short-term debt from Columbia's capital structure in conjunction with the removal of the 13-month average of nominated gas from the rate base. Mr. Larkin was of the opinion that the nominated gas balances should not earn a return equal to the overall cost of capital because they were financed primarily with short-term debt.[78] Rather, those balances should earn a return based on the System's cost of short-term debt (i.e. 10.73 percent).[79] Mr. Larkin is proposing to trace sources of funds to uses.

The Commission is of the opinion that attempting to trace dollars violates economic and financial principles and is not practical. Leverage in a capital structure has costs and benefits

---

77 Case No. 8738, Order entered July 5, 1983, p. 23.

78 Larkin Pre-Filed Testimony, pp. 8-9.

79 Ibid., p. 9.

and will influence the cost of money to a firm. A highly leveraged capital structure increases the risk that a firm will not be able to cover fixed charges. Bondholders and equity investors require higher returns to induce them to assume the additional risk. A capital structure with little leverage does not take advantage of lower cost fixed interest securities. Removing a portion of rate base and applying a cost other than the composite cost of capital ignores the costs and benefits of leverage. Furthermore, funds flow in and out of a firm constantly as revenues are collected, expenses are incurred and securities are issued. From a practical standpoint, it is impossible to trace a dollar of capital from its source to its final use. Therefore, the Commission is of the opinion that Mr. Larkin's proposal to allow the 13-month average of nominated gas to earn a return based on the System's cost of short-term debt, rather than the overall cost of capital, is inappropriate. The composite cost of capital is the proper return Columbia should be allowed to earn.

Rate of Return Summary

Applying rates of 15 percent for common equity, 11.05 percent for preferred stock, 9.16 percent for long-term debt, and 9.95 percent for short-term debt to the capital structure approved herein produces an overall cost of capital of 11.98 percent. The additional revenue granted will provide a rate of return on net investment of 11.98 percent. The Commission finds this overall cost of capital to be fair, just and reasonable.

REVENUE REQUIREMENTS

The required net operating income, based on the rate of return found fair, just and reasonable of 11.98 percent is $5,904,072. Columbia has an adjusted net operating income of $1,928,164. Therefore, the Commission has increased Columbia's rates and charges by $7,439,652 determined as follows:

Adjusted Net Operating Income	$1,928,164
Required Net Operating Income	5,904,072
Deficiency	$3,975,908
Income Taxes	3,446,046
Uncollectibles Retention	17,698
Increase in Revenues	$7,439,652

REVENUE ALLOCATION AND RATE DESIGN

IUS Tariff

Columbia provides gas to several small distribution companies in eastern Kentucky. At present, there is a markup of 62 cents per Mcf above Columbia's cost of gas. The tariff as filed proposed to increase this markup to 89 cents per Mcf.

These small distribution customers are served from the pipelines of Columbia Transmission, Columbia's supplier, and Columbia has provided very little in facilities investment to provide the IUS delivery services and faces a minimal cost in billing these customers. In the hearing, Mr. Woodrow W. Burchett, Director of Rates, stated that on a cost-of-service basis, the markup should be about 2 cents per Mcf above Columbia's cost of gas which the Commission accepts.

The total volume of gas provided under this tariff is quite small in comparison to Columbia's total sales volume, and reducing this markup will not substantially affect other customers. This markup has increased the cost to the small distribution companies and their customers above the already high costs being paid because of the rates of the Columbia system. The Commission is quite concerned about the situation of some of these small gas utilities which often involves excessive line loss, ineffective management and inadequate maintenance as well as high gas cost. All of these problems have led to loss of consumers and loss of load to consumers still served leading to even further problems. Through this decision, the Commission is ameliorating the gas cost for those companies. The Commission intends to take action on the other aspect of the problem shortly.

There have been substantial legal fees and potential uncollectibles for this service as a result of the high prices and other problems of these companies. The Commission will therefore substantially reduce this markup, but at the same time will adopt a policy of requiring that these customers keep Columbia's payments current. Therefore, Columbia shall file language in the IUS tariff to provide that any distribution customers may be required to establish an escrow account for the purpose of payment to Columbia for the cost of gas under the IUS tariff. An IUS customer may be required to establish this escrow account if it has fallen behind in its payments to Columbia. If the escrow account is required, the IUS customer shall deposit that portion of its receipts that are attributable to the cost of gas directly to that account each month for withdrawal by Columbia.

Purchased Gas Adjustment

Neither the Commission nor Columbia proposed any changes to the PGA in this case, but the Commission is of the opinion that the PGA should be an issue in the next rate case filed by Columbia. Also, the Commission is of the opinion that Columbia should investigate changes in PGA clauses approved by this Commission in recent years for Union Light, Heat, and Power Company and Delta Natural Gas Company prior to the filing of its next rate case.

The Commission has accepted Columbia's proposed method of revenue allocation and rate design, except for the customer charge. The Commission is of the opinion that the customer charge should be increased by approximately the overall percentage of increase in revenue.

Transportion Tariff

Columbia proposed increasing the DS tariff from the current rate of 40 cents per Mcf to 50 cents per Mcf. In response to questions regarding the basis of the 50 cents per Mcf rate, Columbia responded that this was all the customers were willing to pay.

The Commission is concerned about the special marketing programs being developed by pipeline and distribution companies in response to today's competitive markets. On the one hand, transportation tariffs should not provide discounted services that would result in unjustifiable preferential rates for industrial users. On the other hand, the Commission recognizes the advantages of retaining an industrial customer by negotiating a preferential DS rate if the competitive fuel market dictates such a rate. Therefore, the Commission has established the transportation tariff rate of 80 cents per Mcf as found in the attached Appendix A. In order to allow for the flexibility to meet the competitive fuels market, though, the Commission may allow a reduced transportation rate for present or future customers of transportation service upon approval of a contract filed with the Commission which outlines the requirements for the reduced rate.

The methodology used by the Commission to determine the rate for the DS tariff was to average the industrial total gas sales and revenues for rate schedules FC-1, FI-1, and IS-1 and to subtract the average cost of gas as developed in PGA 8738-H. An approximate balance of 80 cents per Mcf was the result of this calculation. This established transportation rate and the flexibility provided by allowing reduced rates upon the approval of contracts is subject to change should the Commission find it appropriate to make adjustments to the tariff as the result of a more thorough review of transportation rates in general.

Purchases of Local Production

In his testimony in the hearing on August 23, 1984, Mr. Clyde E. Clay, Director-Supply Planning, Columbia Gas Distribution Companies, discussed several initiatives undertaken by Columbia to procure greater quantities of locally produced natural gas. These initiatives include contacts with local producers, a contract for supply from The Inland Gas Company, Inc., and negotiations with regard to the construction of a pipeline from the producing regions of Southeastern Kentucky to Lexington. Mr. Clay also indicated that the current efforts to procure less expensive supplies of natural gas would continue and that Columbia would take advantage of the special programs offered by its historical supplier, Columbia Transmission. Presently, Columbia is participating in the Phase II transportation program and is purchasing some IS gas from Columbia Transmission.

Columbia is to be commended for its efforts to purchase lower cost natural gas and the Commission urges Columbia to continue these efforts with diligence. Since the last Columbia rate case, Columbia's purchases of local production have increased from roughly 0.7 percent of Columbia's total supply to roughly 3.0 percent. The greater the volume of purchases by Columbia of lower cost gas supplies, the greater will be the rate relief felt by Columbia's customers.

Columbia should advise the Commission on a semi-annual basis of its continuing efforts to purchase local and lower cost gas supplies and to document the savings resulting from these purchases as they appear in the PGA filings. The semi-annual (June & December) reports shall include volumes purchased, cost of gas, transportation fees and savings. The reports shall also contain a narrative description of Columbia's continuing efforts to purchase local and lower cost gas supplies.

FINDINGS AND ORDERS

The Commission, after examining the evidence of record and being advised, is of the opinion and finds that:

1. The rates and charges proposed by Columbia should be denied upon application of KRS 278.030.

2. The rates and charges in Appendix A are the fair, just and reasonable rates to be charged by Columbia.

IT IS THEREFORE ORDERED that the rates and charges proposed by Columbia be and they hereby are denied.

IT IS FURTHER ORDERED that the rates and charges in Appendix A be and they hereby are the fair, just and reasonable rates to be charged by Columbia for service rendered on and after October 20, 1984.

IT IS FURTHER ORDERED that Columbia shall revise the IUS Tariff to provide that any distribution customers may be required to establish an escrow account for the purpose of purchased gas cost and deposit that portion of its receipts that are attributable to the cost of gas directly to that account each month in any case where a utility has fallen behind in its payments.

IT IS FURTHER ORDERED that Columbia shall file semi-annual reports of its continuing efforts to purchase local and lower cost gas supplies in accordance with the findings on page 34.

Done at Frankfort, Kentucky, this 18th day of October, 1984.

PUBLIC SERVICE COMMISSION

Richard D. Hemenway

Chairman

Vice Chairman

Commissioner

ATTEST:

Secretary

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 9003 DATED October 18, 1984.

The following rates and charges are prescribed for the customers served by Columbia Gas of Kentucky, Inc. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under authority of this Commission prior to the date of this Order.

The following rates and charges have incorporated all changes through PGA Case No. 8347-K.

GENERAL SERVICE RATE SCHEDULE - GS Residential

Customer Charge:
$3.25 per delivery point per month

Commodity Charge:
First 50 Mcf per month @ $5.998 per Mcf
All Over 50 Mcf per month @ $5.814 per Mcf

GENERAL SERVICE RATE SCHEDULE - GS-Commercial and Industrial

Customer Charge:
$5.50 per delivery point per month

Commodity Charge:
First 200 Mcf per month @ $6.246 per Mcf
All Over 200 Mcf per month @ $6.099 per Mcf

RATE SCHEDULE FC-1
FIRM AND CURTAILABLE GAS SERVICE - OPTIONAL

Firm Volume (Daily Firm Volume Times Number of Days in Month)

First 1,000 Mcf per month @ $6.161 per Mcf
Over 1,000 Mcf per month @ $6.111 per Mcf

Curtailable Volume
$5.962 per Mcf of Curtailable Volume of gas delivered hereunder each billing month.

AVAILABILITY OF EXCESS GAS

In the event Buyer shall desire to purchase on any day gas in excess of Buyer's specified Maximum Daily Volume, Buyer shall inform the Seller and if the Seller is able to provide such excess gas required by Buyer from its operations, Seller shall make such excess gas available at the rate of $5.962 per Mcf.

If such excess gas cannot be made available to Buyer from Seller's own operations, Seller may comply with such request to the extent that excess gas is temporarily available from Seller's gas supplier, in order to provide gas which otherwise would not be available. Such excess volume taken shall be paid for at the rate of $4.87 per Mcf.

On any day when Buyer has been notified to curtail deliveries, Buyer may request excess gas and to the extent such excess gas can be obtained from Seller's supplier, Buyer shall pay Seller at the rate of $4.87 per Mcf for all such volumes taken which would otherwise not be available.

RATE SCHEDULE FI-1
FIRM AND INTERRUPTIBLE GAS SERVICE - OPTIONAL

Daily Firm Volume
First 5,000 Mcf per month @ $6.091 per Mcf
Over 5,000 Mcf per month @ $6.060 per Mcf

Daily Interruptible Volume
$5.880 per Mcf of Daily Interruptible Volume of gas delivered hereunder each billing month.

AVAILABILITY OF EXCESS GAS

In the event Buyer shall desire to purchase on any day gas in excess of Buyer's specified Maximum Daily Volume, Buyer shall inform the Seller and if the Seller is able to provide such excess gas required by Buyer from its operations, Seller shall make such excess gas available at the rate of $5.880 per Mcf.

If such excess gas cannot be made available to Buyer from Seller's own operations, Seller may comply with such request to the extent that excess gas is temporarily available from Seller's gas supplier, in order to provide gas which otherwise would not be available. Such excess volume taken shall be paid for at the rate of $4.87 per Mcf.

On any day when Buyer has been notified to curtail deliveries, Buyer may request excess gas and to the extent such excess gas can be obtained from Seller's supplier, Buyer shall pay Seller at the rate of $4.87 per Mcf for all such volumes taken which would otherwise not be available.

RATE SCHEDULE IS-1
INTERRUPTIBLE GAS SERVICE - OPTIONAL

Billing Months April Through November

$6.250 per Mcf for all volumes delivered each month up to and including the Average Monthly Winter Volume. The Average Monthly Winter Volume shall be one-fourth of the total delivery during the preceding billing months of December through March.

$5.850 per Mcf for all volumes delivered each month in excess of the Average Monthly Winter Volume.

Billing Months December Through March

$6.250 per Mcf delivered.

RATE SCHEDULE IUS-1
INTRASTATE UTILITY SERVICE

For all gas delivered each month $4.957 per Mcf.

MINIMUM MONTHLY CHARGE

The maximum Daily Volume specified in the Sales Agreement multiplied by $4.957 per Mcf.

RATE SCHEDULE DS-DELIVERY SCHEUDLE

Rate
Eighty cents ($0.80) per Mcf for all gas delivered each billing month.

The base rates for the future application of the purchased gas adjustment clause are:

Columbia Gas Transmission Corporation

Zone 1 and Zone 3 rate per DTH	Demand	Commodity
Schedule CDS	$ 5.86	415.83¢
Schedule WS		
Demand	$1.39	
Winter Contract Quantity	2.44¢	

Columbia LNG Corporation

LNG - Rate per DTH	$ 4.1083

Inland Gas Company

All Purchases - Rate per Mcf	$ 3.4221